Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1-99. (Canceled)

100. (New) A functional derivative of ICAM-1, wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) Q1T/KA;

(b) S5/T;

(c) T20CS/ACT;

(d) Q58/H;

(e) E59/K;

(f) Q73/H;

(g) Q73/T;

(h) G101K/AN;

(i) E111GGA/KAGS; and

(j) N175/A;

wherein said amino acid substitution is defined in terms of native ICAM-1 consisting of the amino acid sequence of Fig. 8.

101. (New) The functional derivative of ICAM-1 as claimed in claim 100, wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) Q1T/KA;

(b) S5/T;

(c) Q58/H;

(d) E59/K; and

(e) E111GGA/KAGS;

with an enhanced ability, relative to native ICAM-1 consisting of the amino acid sequence of Fig. 8, to bind LFA-1.

102. (New) The functional derivative of ICAM-1 as claimed in claim 100, wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) S5/T;

(b) T20CS/ACT;

(c) E59/K;

(d) Q73/H;

(e) Q73/T;

(f) G101K/AN;

(g) E111GGA/KAGS; and

(h) N175/A;

with an enhanced ability, relative to native ICAM-1 consisting of the amino acid sequence of Fig. 8, to bind HRV.

103. (New) An artificial lipid membrane comprising a functional derivative of ICAM-1, wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) Q1T/KA;

(b) S5/T;

(c) T20CS/ACT;

(d) Q58/H;

(e) E59/K;

(f) Q73/H;

(g) Q73/T;

(h) G101K/AN;

(i) E111GGA/KAGS; and

(j) N175/A;

wherein said amino acid substitution is defined in terms of native ICAM-1 consisting of the amino acid sequence of Fig. 8.

104. (New) The artificial lipid membrane as claimed in claim 103, wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) Q1T/KA;

(b) S5/T;

(c) Q58/H;

(d) E59/K; and

(e) E111GGA/KAGS;

with an enhanced ability, relative to native ICAM-1 consisting of the amino acid sequence of Fig. 8, to bind LFA-1.

105. (New) The artificial lipid membrane as claimed in claim 103, wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) S5/T;

(b) T20CS/ACT;

(c) E59/K;

(d) Q73/H;

(e) Q73/T;

(f) G101K/AN;

(g) E111GGA/KAGS; and

(h) N175/A;

with an enhanced ability, relative to native ICAM-1 consisting of the amino acid sequence of Fig. 8, to bind HRV.

106. (New) The artificial lipid membrane as claimed in claim 103, wherein said artificial lipid membrane is an artificial planar membrane.

107. (New) A pharmaceutical composition comprising a functional derivative of ICAM-1 in admixture with a pharmaceutically acceptable carrier, wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) Q1T/KA;

(b) S5/T;

(c) T20CS/ACT;

(d) Q58/H;

(e) E59/K;

(f) Q73/H;

(g) Q73/T;

(h) G101K/AN;

(i) E111GGA/KAGS; and

(j) N175/A;

wherein said amino acid substitution is defined in terms of native ICAM-1 consisting of the amino acid sequence of Fig. 8.

108. (New) The pharmaceutical composition as claimed in claim 107, wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) Q1T/KA;

(b) S5/T;

(c) Q58/H;

(d) E59/K; and

(e) E111GGA/KAGS;

with an enhanced ability, relative to native ICAM-1 consisting of the amino acid sequence of Fig. 8, to bind LFA-1.

109. (New) The pharmaceutical composition as claimed in claim 107, wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) S5/T;

(b) T20CS/ACT;

(c) E59/K;

(d) Q73/H;

(e) Q73/T;

(f) G101K/AN;

(g) E111GGA/KAGS; and

(h) N175/A;

with an enhanced ability, relative to native ICAM-1 consisting of the amino acid sequence of Fig. 8, to bind HRV.

110. (New) A functional derivative of ICAM-1, wherein said functional derivative is a soluble derivative of ICAM-1, and wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) Q1T/KA;

(b) S5/T;

(c) K8/E;

(d) R13/K;

(e) T20CS/ACT;

(f) Y52/F;

(g) Q58/H;

(h) E59/K;

(i) S61/I;

(j) M64/I;

(k) N68/K;

(l) D71/E;

(m) Q73/H;

(n) Q73/T;

(o) S74/A;

(p) T75/A;

(q) R88V/EA;

(r) E90/Q;

(s) L91/A;

(t) G101K/AN;

(u) E111GGA/KAGS;

(v) R125/E;

(w) E127/R;

(x) K128/R;

(y) V136GE/GVK;

(z) N175/A; and

(aa) A178/G;

wherein said amino acid substitution is defined in terms of native ICAM-1 consisting of the amino acid sequence of Fig. 8.

111. (New) The functional derivative of ICAM-1 as claimed in claim 110, wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) Q1T/KA;

(b) S5/T;

(c) Q58/H;

(d) E59/K;

(e) M64/I;

(f) N68/K;

(g) D71/E;

(h) E90/Q;

(i) E111GGA/KAGS; and

(j) K128/R;

with an enhanced ability, relative to native ICAM-1 consisting of the amino acid sequence of Fig. 8, to bind LFA-1.

112. (New) The functional derivative of ICAM-1 as claimed in claim 110, wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) S5/T;

(b) K8/E;

(c) R13/K;

(d) T20CS/ACT;

(e) Y52/F;

(f) E59/K;

(g) S61/I;

(h) M64/I;

(i) N68/K;

(j) D71/E;

(k) Q73/H;

(l) Q73/T;

(m) S74/A;

(n) T75/A;

(o) R88V/EA;

(p) E90/Q;

(q) L91/A;

(r) G101K/AN;

(s) E111GGA/KAGS;

(t) R125/E;

(u) E127/R;

(v) K128/R;

(w) V136GE/GVK;

(x) N175/A; and

(y) A178/G;

with an enhanced ability, relative to native ICAM-1 consisting of the amino acid sequence of Fig. 8, to bind HRV.

113. (New) A pharmaceutical composition comprising a functional derivative of ICAM-1 in admixture with a pharmaceutically acceptable carrier, wherein said functional derivative is a soluble derivative of ICAM-1, and wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) Q1T/KA;

(b) S5/T;

(c) T20CS/ACT;

(d) Q58/H;

(e) E59/K;

(f) Q73/H;

(g) Q73/T;

(h) G101K/AN;

(i) E111GGA/KAGS; and

(j) N175/A;

wherein said amino acid substitution is defined in terms of native ICAM-1 consisting of the amino acid sequence of Fig. 8.

114. (New) The pharmaceutical composition as claimed in claim 113, wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) Q1T/KA;

(b) S5/T;

(c) Q58/H;

(d) E59/K; and

(e) E111GGA/KAGS;

with an enhanced ability, relative to native ICAM-1 consisting of the amino acid sequence of Fig. 8, to bind LFA-1.

115. (New) The pharmaceutical composition as claimed in claim 113, wherein said functional derivative contains an amino acid substitution selected from the group consisting of:

(a) S5/T;

(b) T20CS/ACT;

(c) E59/K;

(d) Q73/H;

(e) Q73/T;

(f) G101K/AN;

(g) E111GGA/KAGS; and

(h) N175/A;

with an enhanced ability, relative to native ICAM-1 consisting of the amino acid sequence of Fig. 8, to bind HRV.